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embodiments, the transaction may be performed via a Bluetooth connection, a WiFi connection, or other short- or medium-range radio connection between the electronic device and the fast passage gate. The operations of this transaction may be similar to those described above with 5 respect to 512 of flowchart 500 in FIG. 5. In some embodiments, the credential (e.g., virtual payment card) used for the transaction may be a card compatible with a transportation system and may store a remaining balance (e.g., an actual cash value) that can be used to process the transaction.

FIG. 8 illustrates an example flowchart 800 of operations for a location server to determine a location of an electronic device for a wireless transaction, according to some embodiments. The operations depicted in flowchart 800 may be performed by a location server, such as one or more of 15 location server 120 of FIG. 1, location server 220 of FIG. 2, or location server 400 of FIG. 4. It is to be appreciated that not all operations may be needed to perform the disclosure provided herein. In some implementations, additional or alternate operations may be performed. Further, some of the 20 operations may be performed concurrently, or in a different order than shown in FIG. 8.

In some embodiments, the location server may perform operations to determine the location of the electronic device using one or more ToF measurements received from one or 25 more UWB radios. The location server may send location data to the electronic device to allow the electronic device to select an appropriate credential (e.g., virtual payment card). In some embodiments, the location server may also perform a wireless transaction with the electronic device when the 30 electronic device crosses a virtual line representative of a fast passage gate such as, for example, fast passage gate 650 of FIG. 6.

At **810**, the location server receives one or more distance measurements (or other position references) from one or 35 more UWB radios relating to an electronic device. The one or more distance measurements may be an embodiment of message **238** of FIG. **2**. In some embodiments, the one or more distance measurements received from the UWB radios may be based on ToF measurements made by the one or 40 more UWB radios. In some embodiments, the location server may receive the one or more ToF measurements and calculate the distance based on the received ToF measurements.

At **820**, based on the distance measurement data, the 45 location server can determine location data of the electronic device within an environment via, for example, triangulation (or trilateration).

At 830, the location server sends the location data to the electronic device. As described above, the location data may 50 be sent via a wireless radio communicatively coupled to the location server. In some implementations, the wireless radio may be an embodiment of wireless radio 122 of FIG. 1 or wireless radio 622 of FIG. 6. The wireless radio may operate on any number of wireless communication protocols, such 55 as any/all of a Wi-Fi protocol, a Bluetooth protocol, a cellular communication standards (e.g., UMTS, CDMA, or LTE standards), and/or a proprietary scheme. In some embodiments, the wireless radio may utilize "small cell" or "distributed antennae system" deployments.

In some embodiments, the location data may have different formats. In some embodiments, the location data may be in the form of a coordinate within a virtual map stored on the electronic device. In some embodiments, the location data may include location information of both the electronic 65 device and any terminals in the environment (e.g., stationary merchant terminal 130 of FIG. 1, mobile merchant terminal

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132 of FIG. 1, transit gate terminals 140A-C of FIG. 1, or fast passage gate 650 of FIG. 6). In some embodiments, the location data may be an indication that the electronic device is within a predetermined distance from a terminal.

At 840, the location server may determine whether the electronic device crosses the fast passage gate or other such threshold associated with passage through the fast passage gate. As described above, in some embodiments, a virtual line may be representative of the fast passage gate, in which the virtual line delineates between a general area of the environment—e.g., outside and inside of the fast passage gate, respectively. If the location server determines that the electronic device does not cross the virtual line, the electronic device returns to operation 810 and receives distance measurements from UWB radios.

At **850**, if the location server determines that the electronic device crosses the virtual line or other such demarcation point (e.g., for charging a fee), the location server may contact the electronic device via the wireless radio. The electronic device may then initiate the transaction as described above with respect to **714** of FIG. **7**. In some embodiments, the electronic device may initiate the transaction with the location server.

Various embodiments can be implemented, for example, using one or more computer systems, such as computer system 900 shown in FIG. 9. Computer system 900 can be any well-known computer capable of performing the functions described herein. For example, and without limitation, computer system 900 can be capable selecting an appropriate credential (e.g., virtual payment card) based on (i) a relative location of an electronic device to a terminal and (i) the type of terminal. For example, one or more computer systems 900 can be capable of performing operations related to some or all of the electronic devices (e.g., electronic devices 101-104 of FIG. 1, electronic device 201 of FIG. 2, and electronic device 300 of FIG. 3), the terminals (e.g., stationary merchant terminal 130 of FIG. 1, mobile merchant terminal 132 of FIG. 1, transit gate terminals 140A-C of FIG. 1, and fast passage gate 650 of FIG. 6), and the location servers (e.g., location server 120 of FIG. 1, location server 220 of FIG. 2, or location server 400 of FIG. 4) described above with respect to FIGS. 1-8.

Computer system 900 includes one or more processors (also called central processing units, or CPUs), such as a processor 904. Processor 904 is connected to a communication infrastructure or bus 906. Computer system 900 also includes input/output device(s) 903, such as monitors, keyboards, pointing devices, etc., that communicate with communication infrastructure or bus 906 through input/output interface(s) 902. Computer system 900 also includes a main or primary memory 908, such as random access memory (RAM). Main memory 908 may include one or more levels of cache. Main memory 908 has stored therein control logic (e.g., computer software) and/or data.

Computer system 900 may also include one or more secondary storage devices or memory 910. Secondary memory 910 may include, for example, a hard disk drive 912 and/or a removable storage device or drive 914. Removable storage drive 914 may be a floppy disk drive, a magnetic tape drive, a compact disk drive, an optical storage device, tape backup device, and/or any other storage device/drive.

Removable storage drive 914 may interact with a removable storage unit 918. Removable storage unit 918 includes a computer usable or readable storage device having stored thereon computer software (control logic) and/or data. Removable storage unit 918 may be a floppy disk, magnetic